

ABSTRACT OF THE DISCLOSURE

The invention provides a network communication system and the method of dynamic routing for efficiently determining a message-transporting path between a sending host and destination host on the Internet. When the sending host and destination host cannot effectively build a connection, the network communication system of the invention uses the method of dynamic routing to find the most suitable routing host.

(a) A sending host directly transports messages to a destination host. If the sending host can effectively build a network connection and transport messages to the destination host, the method ends, otherwise the method proceeds to step (b).

(b) The system finds a series of routes that can be effectively connected between the sending host and the destination host.

The Internet protocol (IP) addresses of the series of routers are successively put into a list. (c) The system judges whether the list includes at least one IP address; if so, the method proceeds to step (d), otherwise the method proceeds to step

(i). (d) The system moves a pointer to point to the last IP address of the list. (e) The system finds a domain of the IP address presently pointed by the pointer. (f) If the system finds a message-routing-in-charge host in the domain, the method proceeds to step (g), otherwise the method proceeds

to step (h). (g) The sending host transports the messages to the message-routing-in-charge host. The message-routing-in-charge host is regarded as another sending host and then the method proceeds to the step (a). (h) If the
5 IP address pointed by the pointer is the first IP address of the list, the method proceeds to the step (i), otherwise the method proceeds to step (j). (i) The sending host keeps the messages for a predetermined time and then the method proceeds to the step (a). (j) The system moves the pointer to point
10 to an IP address previous to that presently pointed in the list and then the method proceeds to the step (e).

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